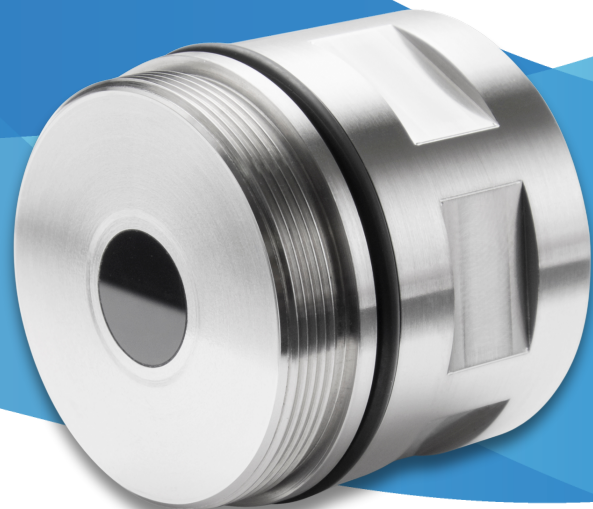


- L** LABORATORY
- P** PROCESS
- S** SOFTWARE
- A** AUTOMATION

ics²

Customizable Inline Concentration Sensor

Highly customizable concentration sensor with the size of a golf ball



Specifications	Inline Concentration Sensor
Measurement principle	Total internal reflection refractometer
Measuring range	1.3270 - 1.4036 RI / 0 - 40 Brix (up to 50 Brix on request)
Accuracy	± 0.0002 RI / ± 0.15 Brix at 25°C
Reproducibility	0.0001 RI / 0.075 Brix
Resolution	0.0001 RI / 0.05 Brix
Process temperature	- 10 to + 60 °C
Ambient temperature	- 10 to + 60 °C
Temperature measurement accuracy	± 0.3 °C
Temperature measurement	NTC sensor for measurement of sample temperature placed inside the prism
Process pressure	0 - 4 bar
Interfaces standard	RS485 Modbus RTU 4-pin M8 plug M8 cable 90° 300 mm
Interface optional	2x 4 - 20 mA USB
Mechanical interfaces standard	DN40 M38x1, thread length 7 mm radially sealing O-ring 36x2 NBR
Mechanical interfaces optional	VariVent type N 1.4404 Stainless steel
Mechanical interface on request	Triclamp-, DIN-, ISO-flange, APV 1.4404 Stainless steel
Dimensions	44 mm (60 mm incl. 90° Cable) x Ø 40 mm
Weight	155 g
IP class	IP68
Light source, wavelength	LED, 589 nm
Power supply	12-28 V DC
Current consumption	max. 30 mA (at 24 V)
Wetted parts	N-BK7, 1.4404 Stainless steel, PU
Housing material	1.4404 Stainless steel
PC Software	UniConfig (only with #17618 RS485-USB adapter cable)

Range of Models

Model	Scale	Measuring range	Accuracy	Reproducibility	Resolution
all	Refractive index	1.3270...1.4036	0.0002	0.0001	0.0001
iCS ² cust. #300003	Sucrose Brix	0...40.00 Brix	0.15 Brix	0.075 Brix	0.05 Brix
iCS ² -CL #300000	Cooling lubricants	0...20.00 %wt	0.3 %wt	0.2 %wt	0.1 %wt
iCS ² -EG #300001	Ethylene glycol or propylene glycol	0...56.0 %wt	0.3 %wt	0.15 %wt	0.1 %wt
Further scales on request!					

Further applications

- Cleaning agents, e.g.: Dirl-LUM603, Promoclean™, SupraWT, deconex®, windshield wiper fluid
- Freezing point depression agents, e.g.: Glysantine, G12, G12+, G13
- Brake fluid, DOT3, DOT4, DOT5
- Hydraulic oil monitoring
- AdBlue
- and many more

Accessories

- VARINLINE Adapter
- Demonstration setup
- RS485-USB adapter cable
- T-Piece Housing ½" NPT
- Analog Control Unit
- Modbus – 4 - 20 mA Converter

